

Application No. 10/753,400
Attorney Docket No. 1740-000037/US

AMENDMENTS TO THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A recording medium, comprising:
a data area including at least two data sections; and
a linking area to link neighboring data sections, the linking area including user data and parity data,

wherein the user data is encoded using an encoding process and a frame in one of the data area and the linking area is identifiable based on a combination of a frame sync signal of the frame and a frame sync signal of a preceding frame.

2. (Cancelled)

3. (Previously Presented) The recording medium of claim 1, wherein the encoding process includes Error Correction process.

4. (Original) The recording medium of claim 3, wherein the encoding process is an RS(Reed Solomon) encoding process.

5. (Original) The recording medium of claim 4, wherein the RS encoding process is at least one of processes used for encoding of main data.

6. (Previously Presented) The recording medium of claim 5, wherein the RS encoding process is one of a RS(62,30,33) and RS(248,216,33) encoding process.

7. (Original) The recording medium of claim 1, wherein the linking area further includes dummy data.

8. – 12. (Cancelled)

13. (Previously Presented) The recording medium of claim 1, wherein dummy data fills a beginning portion of the linking frame and the parity data fills an ending portion of the

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linking frame.

14. (Currently Amended) A method of forming a recording medium, comprising:
forming a linking area to link neighboring data sections of a data area while recording data onto the recording medium;

writing at least user data and parity data in the linking area to link the neighboring data sections, the user data is encoded using an encoding process and a frame in one of the data area and the linking area is identifiable based on a combination of a frame sync signal of the frame and a frame sync signal of a preceding frame.

15. (Currently Amended) A method of reproducing data from a recording medium, comprising:

utilizing a linking area, including at least user data and parity data, which links neighboring data sections of a data area, to reproduce the data,

wherein the user data is encoded using an encoding process including error correction and a frame in one of the data area and the linking area is identifiable based on a combination of a frame sync signal of the frame and a frame sync signal of a preceding frame, and the encoding process includes Error Correction process.

16. (Cancelled)

17. (Previously Presented) The method of claim 15, wherein the encoding process is an RS(Reed Solomon) encoding process.

18. (Original) The method of claim 17, wherein the RS encoding process is at least one of processes used for encoding of main data.

19. (Previously Presented) The method of claim 18, wherein the RS encoding process is one of a RS(62,30,33) and RS(248,216,33) encoding process.

20. (Previously Presented) The method of claim 17, wherein the utilizing step includes a step of performing error correction based on one of processes used for encoding of main data.

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21. (Previously Presented) The method of claim 18, wherein the utilizing step includes a step of performing error correction based on one of a RS(62,30,33) and RS(248,216,33) encoding process.

22. (Currently Amended) A method of recording data on a recording medium, comprising:

utilizing a linking area, including at least user data and parity data, which links neighboring data sections of a data area, to record the data,

wherein the parity data is used for error correction and a frame in one of the data area and the linking area is identifiable based on a combination of a frame sync signal of the frame and a frame sync signal of a preceding frame.

23. (Cancelled)

24. (Previously Presented) The method of claim 22, wherein the user data is encoded using an encoding process, and the encoding process includes Error Correction process.

25. (Original) The method of claim 24, wherein the encoding process is an RS(Reed Solomon) encoding process.

26. (Original) The method of claim 25, wherein the RS encoding process is at least one of processes used for encoding of main data.

27. (Previously Presented) The method of claim 26, wherein the RS encoding process is one of a RS(62,30,33) and RS(248,216,33) encoding process.

28. (Previously Presented) The method of claim 22, wherein the utilizing step includes a step of performing the error correction based on one of processes used for encoding of main data.

29. (Previously Presented) The method of claim 28, wherein the step of performing the error correction is based on one of a RS(62,30,33) and RS(248,216,33) encoding process.

30. (Currently Amended) An apparatus for reproducing data from a recording

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medium, said apparatus utilizing a linking area, including at least user data and parity data, which links neighboring data sections of a data area, to reproduce the data,

wherein the parity data is used for error correction and a frame in one of the data area and the linking area is identifiable based on a combination of a frame sync signal of the frame and a frame sync signal of a preceding frame.

31. (Currently Amended) A method of encoding user data on a recording medium, comprising:

utilizing at least one of parity data and dummy data included in a linking area to encode the user data, the linking area links neighboring data sections of a data area on the recording medium,

wherein the parity data is used for error correction and a frame in one of the data area and the linking area is identifiable based on a combination of a frame sync signal of the frame and a frame sync signal of a preceding frame.

32. (Cancelled)

33. (Previously Presented) The method of claim 31, wherein at least a RS encoding process used for encoding of main data is used to encode the user data.